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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,593	12/05/2003	Richard Aumayer	10191/3417	1544
26646	7590	07/18/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			BOATENG, ALEXIS ASIEDUA	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,593

Applicant(s)

AUMAYER ET AL.

Examiner

Alexis Boateng

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claim 3 - 5, 12 and 13 are withdrawn in view of the newly discovered reference(s) to Minamiura (U.S. 2002/0000787). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-7, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Minamiura (U.S. 2002/0000787).

Regarding claim 1, 12 and 15, Koo discloses wherein a method for charging a battery having a control device (figure 2 item 10) that influences a charging current for the battery in a predefined manner and carries out at least to different charging methods, the method comprising:

in a first charging method, maintaining a substantially constant voltage (column 1 lines 15 – 19) and;

in a second charging method, taking measures resulting in dynamization (column 1 lines 31: in the third stage of charging, which comes directly after the first stage of charging with a voltage, the voltage is increased which results in

dynamization). Koo discloses the invention as previously claimed, but does not disclose the remainder. Minamiura discloses in paragraphs [0013] – [0014] wherein the battery is discharged after it has been charged in the second charging process. At the time of invention, it would have been obvious to a person of ordinary skill to modify the Koo system with the Minamiura system so that the battery is not damaged by excess internal pressure.

Regarding claim 5, Koo does not disclose the invention as claimed. Minamiura discloses in paragraph [0037] wherein the battery is discharged after the state of charge has exceeded 100%. This can be seen as a de-excitation process as pressure is released as it is discharged and the charging rate is brought down.

Regarding claim 6, Koo discloses in wherein further comprising increasing a charging voltage with respect to a usual value in the second charging method.

Regarding claim 7, Koo discloses wherein the charging is increased to about 16 volts (column 1 lines 31). Koo discloses the claimed invention except for the exact value of 16 volts. It would have been obvious to a person of ordinary skill in the art to modify the voltage so that it is at a higher voltage so that it takes a shorter time to charge. Since it has been held that where the general condition of a claim are disclosed in a prior art, discovering an optimum value of a result variable involves only routine skill in the art. In re Bosch, 617 F.2d 272, 205 USPQ 214 (CCPA 1980).

3. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Roseman (U.S. 5,623,197).

Regarding claim 2, Koo does not disclose wherein the battery is a lead acid battery in a motor vehicle that is charged via a generator that is regulated to predefined voltages via a voltage regulator. Roseman discloses in column 1 lines 12 – 20 wherein a lead acid battery is used in motor vehicle. Roseman further discloses in column 4 lines 21 – 47 wherein the generator charges the battery and wherein the generator is regulated by the voltage regulator. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Koo system with the Roseman system so that damaging excessive overcharge can be prevented.

Regarding claim 8, Koo does not disclose the invention as claimed. Roseman discloses in column 5 lines 11 – 17 wherein the charging voltage is increased via corresponding controlling by a voltage regulator, which provides an increased target voltage value for regulating an output voltage. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Koo system with the Roseman system so that there is a higher battery charge rate and a quicker battery recharge.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Kohl (U.S. 5,594,321).

Regarding claim 9, Koo does not disclose the invention as claimed. Kohl discloses in figure 1 items 3 and 61 wherein the bridge rectifier is disposed within the generator, influencing the charging voltage to be rectified in the output stage. At the time of invention, it would have been obvious to a person of ordinary skill

in the art to modify the Koo system with the Kohl system so that faults in the battery can be detected.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Maechara (U.S. 6,777,905).

Regarding claim 10, Koo does not disclose the invention as claimed. Maechara discloses in column 4 lines 56 – 65 wherein the excitation current is interrupted after a time, then this process is repeated. Maechara discloses the claimed invention except it does not specify wherein the first time is in a range of 20 to 60 seconds and second time being about one second. It would have been obvious to a person of ordinary skill in the art to repeat the process so that the output level of the voltage is controlled. Since it has been held that there, where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claim 11, Koo does not disclose the invention as claimed. Maechara discloses in figure 1 item 201, a MOSFET, disposed in a voltage regulator, item 2 used to de-excite the charging device. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Koo system with the Maechara system so that the voltage can be properly regulated.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Bertness (U.S. 2003/0025481).

Regarding claim 13, Koo discloses wherein a method for charging a battery having a control device (figure 2 item 10) that influences a charging current for

the battery in a predefined manner and carries out at least to different charging methods, the method comprising:

in a first charging method, maintaining a substantially constant voltage (column 1 lines 15 – 19) and;

in a second charging method, taking measures resulting in dynamization (column 1 lines 31: in the third stage of charging, which comes directly after the first stage of charging with a voltage, the voltage is increased which results in dynamization). Koo discloses the invention as previously claimed, but does not disclose the remainder. Bertness discloses in paragraphs [0015] – [0018] wherein the battery charges the load, which requires a higher voltage. Since the load requires a higher voltage to be powered, the battery's charging voltage is increased. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Koo system with the Bertness system so that a sufficient amount of voltage is provided to the loads so they work properly.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (U.S. 6,147,473) in view of Cheiky (U.S. 6,459,243).

Regarding claim 14, Koo does not disclose the invention as claimed. Cheiky discloses column 2 lines 17 - 25 wherein protective methods must be employed to prevent damage from any of the methods used. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Koo system with the Kohl system so that the battery is not easily destroyed.

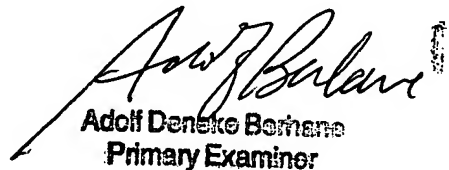
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB


Adolf Deneko Borhane
Primary Examiner